

ENVIRONMENTAL NOTIFICATION FORM

Edgemere Crossing at Flint Pond

180 Hartford Turnpike, Shrewsbury, MA 01545

SUBMITTED TO

Massachusetts Executive
Office of Energy and
Environmental Affairs

MEPA Office

IN ASSOCIATION WITH

RJO'Connell & Associates,
Inc.

EcoTec Inc.

SUBMITTED BY

Route 20 Nominee Trust
and Demoulas Super
Markets, Inc.
881 East Street,
Tewksbury, MA 01876

PREPARED BY



DATE

June 17, 2019



June 17, 2019

Ref: 13775.00

Kathleen A. Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: Environmental Notification Form, Edgemere Crossing at Flint Pond

Dear Secretary Theoharides,

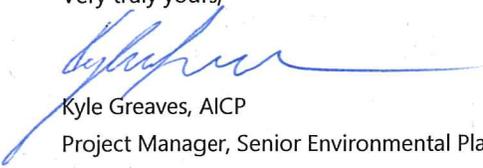
On behalf of Route 20 Nominee Trust and Demoulas Super Markets, Inc. (collectively, the "Proponent"), VHB is pleased to submit the enclosed Environmental Notification Form ("ENF") for the construction of a mixed use development of approximately 427,500 square feet ("SF") of commercial space and approximately 250 rental residential units (the "Project"), to be built on an approximately 68-acre site located along Route 20 in Shrewsbury, Massachusetts (the "Site", or "Project Site").

The Project includes a new Market Basket Super Market (approximately 80,000 SF) and general retail space (approximately 65,000 SF), which could include pharmacy and retail banking uses, and approximately 250 rental residential units (approximately 282,500 SF). The Project also includes construction of new utility service connections, construction of a stormwater management system, installation of landscaping, construction of site improvements and parking facilities, and improved Project Site access off of Route 20.

The Project will complement and support the surrounding land uses along the Route 20 Corridor by providing resources, new retail opportunities, new jobs and new housing (including affordable housing) for the surrounding population. The mixed-use nature of the Project also furthers the Town's master plan for the region, will attract a complementary mix of commercial and residential uses that provide an economic and fiscal benefit to the Town, and will kickstart the Town's desired redevelopment of the Route 20 Corridor.

We respectfully request that you publish notice of availability of the ENF for public review in the June 26th edition of *The Environmental Monitor*. Public comments are due by July 16th and a Certificate is due July 26, 2019. We look forward to your review of this Project. Please contact me at (617) 607-2988 if you have any questions.

Very truly yours,



Kyle Greaves, AICP
Project Manager, Senior Environmental Planner

Engineers | Scientists | Planners | Designers

99 High Street
10th Floor
Boston, Massachusetts 02110
P 617.728.7777
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Edgemere Crossing at Flint Pond

Shrewsbury, Massachusetts

SUBMITTED TO **Executive Office of Energy and Environmental Affairs**
100 Cambridge Street, Suite 900 (9th Floor)
Attn: MEPA Office
Boston, MA 02114

PROPONENT **Route 20 Nominee Trust and Demoulas Super Markets, Inc.**
881 East Street
Tewksbury, MA 01876

PREPARED BY **VHB**
99 High Street, 10th Floor
Boston, MA 02110

In association with:

RJO'Connell & Associates, Inc.
EcoTec Inc.

June 17, 2019

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Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

<i>For Office Use Only</i>
EEA#: _____
MEPA Analyst: _____

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Edgemere Crossing at Flint Pond		
Street Address: 180 Hartford Turnpike		
Municipality: Shrewsbury	Watershed: Lake Quinsigamond	
Universal Transverse Mercator Coordinates: UTM 19, 46 80 697 N, 275 208 E	Latitude: 71°43'29"W Longitude: 42°14'46"N	
Estimated commencement date: Spring 2020	Estimated completion date:	
Project Type: Mixed Use (Commercial, Retail, Residential)	Status of project design: 0% complete	
Proponent: Route 20 Nominee Trust and Demoulas Super Markets, Inc. (collectively the "Proponent")		
Street Address: c/o DSM Realty, Inc., 881 East Street		
Municipality: Tewksbury	State: MA	Zip Code: 01876
Name of Contact Person: Kyle Greaves		
Firm/Agency: VHB	Street Address: 99 High Street, 10th Fl.	
Municipality: Boston	State: MA	Zip Code: 02110
Phone: 617.607.2988	Fax:	E-mail: kgreaves@vhb.com
<p>Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:</p> <p>a Single EIR? (see 301 CMR 11.06(8)) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No a Special Review Procedure? (see 301 CMR 11.09) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No a Waiver of mandatory EIR? (see 301 CMR 11.11) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No a Phase I Waiver? (see 301 CMR 11.11) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)</i></p> <p>Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?</p> <p>-11.03(1)(b)(2): Creation of five or more acres of impervious area;</p> <p>-11.03(1)(b)(1): Direct alteration of 25 or more acres of land;</p> <p>-11.03(6)(a)(6): Generation of 3,000 or more New adt on roadways providing access to a single location; and</p> <p>-11.03(6)(a)(7): Construction of 1,000 or more New parking spaces at a single location.</p>		

Which State Agency Permits will the project require?

Please refer to Attachment 2, Figure 1-2.

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

In 2019, State financial assistance in the form of a MassWorks grant was allocated to the Project for the advancement and construction of off-site roadway improvements along Route 20 in the vicinity of the Project. The MassWorks roadway project mitigates the impacts of the Project, and also includes additional improvements desired by the Town of Shrewsbury in accordance with its master plan for the region.

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	67.74 Acres		
New acres of land altered		26.5	
Acres of impervious area	14.50 Acres	8.50 Acres	23 Acres
Square feet of new bordering vegetated wetlands alteration		N/A	
Square feet of new other wetland alteration		N/A	
Acres of new non-water dependent use of tidelands or waterways		N/A	
STRUCTURES			
Gross square footage	0	427,500 SF	427,500 SF
Number of housing units	0	250 Units	250 Units
Maximum height (feet)	0	Less Than 40 FT	Less Than 40 FT
TRANSPORTATION			
Vehicle trips per day	0	11,700 adt	11,700 adt
Parking spaces	0	1,204 Spaces	1,204 Spaces
WASTEWATER			
Water Use (Gallons per day)	0	57,825 GPD	57,825 GPD
Water withdrawal (GPD)	0	57,825 GPD	57,825 GPD
Wastewater generation/treatment (GPD)	0	52,568 GPD	52,568 GPD
Length of water mains (miles)	0	<5 miles proposed¹	<5 miles proposed¹
Length of sewer mains (miles)	0	<5 miles proposed¹	<5 miles proposed¹
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			
Has any project on this site been filed with MEPA before? <input checked="" type="checkbox"/> Yes (EEA # 12341) <input type="checkbox"/> No			

¹ Water and sewer extensions will not exceed the MEPA review thresholds.

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Route 20 Nominee Trust, and Demoulas Super Markets, Inc. (collectively, the “Proponent”), propose the construction of a mixed use development of approximately 427,500 square feet (SF), consisting of a new Market Basket Super Market (approximately 80,000 SF), general retail space (approximately 65,000 SF), and approximately 250 rental residential units (approximately 282,500 SF, including affordable housing), (the “Project”) on an approximately 68-acre site located along Route 20 in Shrewsbury, Massachusetts (the “Site”, or “Project Site”). Refer to Figure 1 in Attachment 2 for a site location map. The Project also includes construction of new utility service connections, construction of a stormwater management system, installation of landscaping, construction of site improvements and parking facilities, and improved site access off of Route 20.

Access to the Project Site will be provided via a right-out driveway along Route 20 in the general location of the current driveway and a signalized full-access driveway which will provide for all movements except left-turns out and a signalized, full-access, driveway at the intersection of Route 20 and Lake Street. Full internal access for vehicles and pedestrians will be provided between the residential and commercial components of the Project.

Development Program

Table 1 presents the conceptual development program. Note: all conceptual dimensions are approximate.

Table 1 Conceptual Development Program

Use/Element	Approx. Dimensions¹
Supermarket	80,000 SF
General Retail	65,000 SF ²
Residential	282,500 SF (250 Units) ³
Total Net New	427,500 SF
Surface Parking	1,204 Spaces ⁴

- 1 All areas are provided as gross square feet
- 2 It is anticipated that potential uses could include, but are not limited to, a pharmacy or retail bank.
- 3 Residential units are anticipated to be rental, and will include 10 percent affordable units.
- 4 The existing site for the former drive-in theater is now predominantly broken asphalt, and there are no striped parking spaces provided or remaining associated with the former drive-in theater.

Project Site and Existing Conditions

The Project Site defined herein is located on an approximately 68-acre site. The Project Site is generally bounded by Route 20 to the north, existing residential development to the east and southeast, the North Grafton municipal line to the south and southwest, and Flint Pond to the west (Figure 2).

The Project Site currently contains an abandoned drive in theatre parking lot consisting of pavement remnants and broken pavement and cleared areas. Under existing conditions,

stormwater runoff discharges untreated into the Flint Pond via the former drive-in and Route 20 drainage systems. Access to the Project Site is currently provided via a driveway along Route 20, east of Lake Street.

The Project Site is comprised of three parcels located within the Town of Shrewsbury's Commercial-Business Zoning District and Route 20 Overlay District.

Land Use Context

Land uses along Route 20 in the vicinity of the Project Site are mixed and include business, commercial, residential and light industrial. Uses beyond the immediate vicinity of the Project Site include additional residential uses north of the Project Site off of Lake Street, and commercial and industrial uses farther east along Route 20. Uses to the west and south of Flint Pond are also mixed, and include business, commercial, residential, and industrial.

Project Site History

In the early 2000s, the Project Site under direction of a different proponent (Flint Pond Development LLC), underwent MEPA review for the development of a new mixed use residential and commercial development up to approximately 360,950 SF (EEA# 12341). The project, as documented in the 2007 Secretary's Certificate on the SEIR, included the construction of 158 units of senior housing, 73,500 SF of retail use, which included a 57,500 SF super market, 6,000 SF of convenience store use, and 10,000 SF of mixed retail developed in two (2) development phases. In 2007 when this project completed MEPA review, the economy entered into the 2008 economic recession, and this proposal never advanced.

Anticipated Impacts:

The Project is being designed to minimize potential environmental impacts to the extent practicable. Project-related impacts, which are to be expected in any development of this scale, are counterbalanced by the significant benefits for the adjacent neighborhoods and the Town. The current site consists of an abandoned drive in movie theater, with approximately 14.5 acres of disturbed area. Potential environmental impacts will be fully described in the Draft Environmental Impact Report (DEIR). Based on the proposed program and current level of design, the Project is expected to include mitigation for potential impacts to the following:

- **Transportation** – The forthcoming DEIR will study transportation impacts at surrounding intersections, and will evaluate trips captured in the neighborhood that may reduce overall Project impacts. Any impacts will be avoided, minimized and mitigated through the implementation of a robust Transportation Demand Management ("TDM") program that seeks to reduce vehicle trip generation and promote alternative modes of transportation, consistent with Federal and Massachusetts plans and policies. Mitigation measures will be determined by the comprehensive traffic impact study, per the Massachusetts Department of Transportation ("MassDOT") guidance to be provided in the DEIR. Please refer to Attachment 3, for additional details on the Transportation Scoping Letter ("TSL").
- **Stormwater** – The proposed stormwater management system will be designed to comply with the DEP Stormwater Regulations in both peak rate attenuation and water quality treatment. Existing drainage and grading patterns will be maintained to the maximum extent possible. A detailed stormwater analysis will be provided in the DEIR.

- **Water and Wastewater** – It is estimated that the Project will use approximately 57,825 gallons of water per day and will discharge approximately 52,568 gallons per day of wastewater into existing systems. A sanitary connection to the municipal system is proposed as part of this project per an Intermunicipal Agreement for Conveyance of Wastewater, dated December 12, 2018, by the Town of Shrewsbury and City of Worcester. Portions of Shrewsbury’s sanitary sewer system have been authorized to be rerouted through a new municipal pump station and sewer main along the Route 20 corridor to connect to the Worcester sanitary sewer system and existing wastewater treatment plant.
- **Greenhouse Gas Emissions** - Potential environmental impacts associated with air quality and greenhouse gas emissions will be more fully described in the subsequent DEIR filing, in compliance with the MassDEP air quality policy and the MEPA Greenhouse Gas Emissions Policy and Protocol, respectively.
- **Construction Period Impacts** – Generally, measures to reduce temporary construction period impacts will include controlling erosion and sedimentation, controlling dust and machinery air emissions, and properly managing construction-related truck traffic on local roadways. Also, the Project will comply with the EPA’s National Pollution Discharge Elimination System (“NPDES”) General Permit Program for Stormwater Discharges from Construction Sites. In the event that any unanticipated contamination is encountered during construction, construction contract specifications will establish soils management protocols and work practices to assure compliance with the MCP and current DEP soil characterization policies and procedures. The impacts of organic soils, if any are encountered, will be managed and mitigated. A detailed analysis of temporary construction period impacts and potential mitigation will be provided in the DEIR.

Project Alternatives:

The following section provides a description and evaluation of the project alternatives that were considered in the site design process in order to work towards the goals and intentions of the Proponent.

- **No Build Alternative:** The No-Build Alternative was dismissed as it would maintain the existing conditions at the Project Site, leaving an abandoned drive in theater on a vacant lot along the Route 20 corridor, which the Town of Shrewsbury has identified as an area in which commercial, residential, and mixed use developments are encouraged. The vacant lot, located in Shrewsbury’s Commercial-Business Zoning District and Route 20 Overlay District, and would not bring new job opportunities or new housing. This alternative would result in none of the economic benefits to the area that the Preferred Alternative would bring. In addition, stormwater runoff would remain untreated and continue to discharge into the Flint Pond via the former drive-in and Route 20 drainage systems.
- **As-of-Right Alternative:** The As-of-Right Alternative contemplates approximately 437,500 SF of development, including a three-story general retail building and an 80,000 SF office building with 2,088 surface parking spaces that could be constructed as-of-right under the existing zoning. Despite the opportunity for significantly more developed building area, the Proponent abandoned this option, as the increased parking, impervious area, and traffic impacts are undesirable from an environmental

impact perspective, and would present both engineering and budgetary issues.

- **Preferred Alternative:** The Preferred Alternative, or the Project, as described above under "Proposed Project" consists of approximately 427,500 SF of development, including the construction of a new Market Basket supermarket and general retail space, and up to 250 units of rental housing (including affordable housing) with up to 1,204 surface parking spaces. As discussed in greater detail in subsequent sections of this ENF, the Proponent is committed to mitigating impacts associated with the Preferred Alternative.

Refer to Section 1.1 of Attachment 1, for an analysis of all Project Alternatives.

Proposed Mitigation:

Appropriate mitigation for Project-related environmental impacts will be determined at the completion of the required impact analyses presently under way, and will be identified in the DEIR. Based on the proposed program and current level of design, the Project is expected to include mitigation for potential impacts to the following:

- Transportation;
- GHG emissions;
- Stormwater;
- Water and Wastewater; and
- Construction Period Impacts.

If the project is proposed to be constructed in phases, please describe each phase:

The Project is seeking local approvals under the Town of Shrewsbury's Special Permit process for development within the Route 20 Overlay District and will be seeking approval for buffer zone impacts from the Shrewsbury Conservation Commission. Local submissions will be made in June 2019, with local approvals expected to be finalized in Autumn, 2019. Groundbreaking for the Project would commence in Spring 2020, with an expected opening date of Spring 2021 for elements of the Project.

Off-site roadway improvements are also expected to commence in Spring 2020 and be substantially finalized by Spring 2021.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

- Yes (Specify _____)
 No

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/priority_habitat/priority_habitat_home.htm)

- Yes (Specify _____) No

HISTORICAL /ARCHAEOLOGICAL RESOURCES:

Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

- Yes (Specify: **19-WR-826, 19-WR-823, 19-WR-818, 19-WR-817, 19-WR-825**) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? Yes (Specify: unknown at this time) No

Consultation with the Massachusetts Historical Commission ("MHC") for this property occurred in 2005-2006 during review for a previous project (MHC RC.27355). Archaeological investigations identified three sites with potential for additional artifacts (Quinsigamond I, II, and III). The project at the time was designed to avoid these three sites, and MHC suggested measures to avoid potential damage to these sites during construction. Those measures will be implemented by the Proponent. Refer to Attachment 5 for additional details.

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site?
 Yes No;

if yes, identify the ORW and its location. _____

(NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs approved by MassDEP; certain waters within Areas of Critical Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.)

Are there any impaired water bodies on or within a half-mile radius of the project site? Yes
 No; if yes,

identify the water body and pollutant(s) causing the impairment: Flint Pond

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? Yes No

STORMWATER MANAGEMENT:

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations:

The Project will be designed to comply with and meet the standards set forth in MassDEP's Stormwater Management Regulations. Best Management Practices ("BMPs") identified in the MassDEP Stormwater Handbook will be utilized to provide water quality and quantity control. Currently there are no stormwater controls at the site.

The proposed drainage infrastructure will incorporate deep sump hooded catch basins to collect stormwater runoff from paved areas, convey it through a closed drainage pipe network and direct it through an oil/particle separator prior to discharging into a stormwater management basin. The Project will have a high-intensity-use parking lot (greater than 1,000 vehicle trips per day) and is considered a land use with higher potential pollutant loading ("LUHPPL"). As such, each drainage network will incorporate a treatment train of BMPs to provide a minimum of 80 percent total suspended solids ("TSS") removal for the 1" water quality volume. Stormwater management basins will include an infiltration component to provide treatment of the 1" water quality volume and a water quantity control component to reduce existing peak flow rates from the Site.

The stormwater management system will be described in greater detail with the submission of the DEIR.

MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes No ; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification): _____

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes ___ No X ;
if yes, describe which portion of the site and how the project will be consistent with the AUL:
_____.

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN?
Yes ___ No X ; if yes, please describe: _____

SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood:

The Project Construction Manager will implement a waste management plan to divert Project-related construction waste material from landfills through recycling and salvaging where practicable. Existing pavement will either be processed on-site for re-use as structural fill or shipped off-site to an asphalt recycling facility.

Should excess soil be generated during construction that requires off-site disposal, analytical testing of the soil will be required so that it can be properly disposed of at an off-site facility. Materials will be handled according to all applicable federal, state and municipal environmental laws and regulations. In the event that subsurface contamination exceeding MCP reporting thresholds is encountered, MassDEP will be notified and the contamination managed in accordance with the Massachusetts Contingency Plan ("MCP").

(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills.

See 310 CMR 19.017 for the complete list of banned materials.)

Will your project disturb asbestos containing materials? Yes ___ No X ;
if yes, please consult state asbestos requirements at <http://mass.gov/MassDEP/air/asbhom01.htm>

Describe anti-idling and other measures to limit emissions from construction equipment:

The Project will comply with the requirements of the Commonwealth's Clean Construction Equipment initiative to the extent practicable, potentially including retrofitting diesel construction vehicles, or utilizing vehicles that use alternative fuels, such as ultra-low-sulfur diesel fuel to reduce emissions during temporary construction activities. In addition, the Commonwealth's anti-idling law will be enforced during the construction phase of the Project with the installation of on-site anti-idling signage.

DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes ___ No X ;
if yes, specify name of river and designation:

If yes, does the project have the potential to impact any of the "outstandingly remarkable" resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River?

Yes ___ No ___ ; if yes, specify name of river and designation: _____;

if yes, will the project result in any impacts to any of the designated "outstandingly remarkable" resources of the Wild and Scenic River or the stated purposes of a Scenic River.

Yes ___ No ___ ;

if yes, describe the potential impacts to one or more of the “outstandingly remarkable” resources or stated purposes and mitigation measures proposed.

ATTACHMENTS:

1. List of all attachments to this document.

Attachment 1: Alternatives Analysis and Regulatory Context

Attachment 2: Supporting ENF Figures

Attachment 3: Transportation Scoping Letter

Attachment 4: ENF Distribution List

Attachment 5: MHC Letter Dated June 8, 2006

2. U.S.G.S. map (good quality color copy, 8-½ x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries.

Refer to Figure 1 and 2 in Attachment 2.

- 3.. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.

Refer to Figure 2 and 3 in Attachment 2.

- 4 Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts.

Refer to Figure 5 in Attachment 2.

5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase).

Refer to Figure 4 in Attachment 2.

6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).

Refer Attachment 4.

7. List of municipal and federal permits and reviews required by the project, as applicable.

Refer to Attachment 1, Table 1-3.

8. List of study area intersections.

Refer to Attachment 3.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1))
 Yes No; if yes, specify each threshold:

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	<u>0 Acres</u>	<u>6.0 Ac</u>	<u>6 Ac</u>
Internal roadways	<u>0 Acres</u>	<u>2.2 Ac</u>	<u>2.2 Ac</u>
Parking and other paved areas	<u>14.5 Ac¹</u>	<u>0.3 Ac</u>	<u>14.8 Ac²</u>
Other altered areas	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Undeveloped areas	<u>53.24 Ac³</u>	<u>-26.5 Ac</u>	<u>26.74 Ac⁴</u>
Total: Project Site Acreage	<u>67.74 Ac</u>	<u>0.00 Ac</u>	<u>67.74 Ac</u>

- 1 Existing impervious area includes remnant foundations and asphalt, and other miscellaneous impervious areas associated with the former Edgemere Drive-In Theater.
- 2 Proposed impervious include vehicle parking, and sidewalks.
- 3 Existing pervious area includes undeveloped forest and open space, and wetlands resource areas.
- 4 Proposed pervious area includes improved open space, landscaping, grass, stormwater infrastructure, and undeveloped forest and wetland resource areas.

B. Has any part of the project site been in active agricultural use in the last five years?
 Yes No; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?

C. Is any part of the project site currently or proposed to be in active forestry use?
 Yes No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? Yes No; if yes, describe:

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? Yes No; if yes, does the project involve the release or modification of such restriction?
 Yes No; if yes, describe:

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? Yes No; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes No ; if yes, describe:

III. Consistency

A. Identify the current municipal comprehensive land use plan
 Title: Shrewsbury Master Plan Date April 2001

B. Describe the project's consistency with that plan with regard to:
 1) economic development

The Project proposes a complementary mix of commercial and residential uses that will increase tax revenue for the Town. The Project will also provide new housing (including affordable housing), and new construction, full-time and part-time employment opportunities for a variety of ages and skill levels, which will help to maintain, and grow employment rates for the Town of Shrewsbury, and support its residents.

- 2) adequacy of infrastructure

Once the actual utility service load demands are determined for the proposed development, individual utility providers will need to be contacted to confirm that there is adequate capacity to serve the Project. The DEIR will provide additional information on infrastructure requirements.

- 3) open space impacts

By constructing the Project on a previously disturbed area, it will reduce the impacts on open space. The Project will also include appropriate landscaping. Approximately 26 acres of the Project Site will remain undeveloped and in a natural, undisturbed state.

- 4) compatibility with adjacent land uses

The Project is located within the Town of Shrewsbury Commercial-Business zoning district and the Route 20 Overlay District. The Project will complement and support the surrounding land uses by providing resources, new retail opportunities, new jobs and new housing for the surrounding population. The mixed-use nature of the Project also furthers the Town's master plan for the region, and will attract a complementary mix of commercial and residential uses that provide an economic and fiscal benefit to the Town.

- C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)
RPA: **Central Massachusetts Regional Planning Commission, Northeast Sub-Region**

Title: **2020 Growth Strategy for Central Massachusetts** Date: **February 29, 2000**

- D. Describe the project's consistency with that plan with regard to:
1) economic development

The Project proposes a complementary mix of commercial and residential uses that will increase tax revenue for the Town. The Project will also provide new housing (including affordable housing), and new construction, full-time and part-time employment opportunities for a variety of ages and skill levels, which will help to maintain, and grow employment rates for the Town of Shrewsbury, and support its residents.

- 2) adequacy of infrastructure

Once the actual utility service load demands are determined for the proposed development, individual utility providers will need to be contacted to confirm that there is adequate capacity to serve the Project. The DEIR will provide additional information on infrastructure requirements.

- 3) open space impacts

By constructing the Project on a previously disturbed area, it will reduce the impacts on open space. The Project will also include appropriate landscaping. Approximately 26 acres of the Project Site will remain undeveloped and in a natural, undisturbed state.

RARE SPECIES SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? ___ Yes **X** No; if yes, specify, in quantitative terms:

¹ **According to the Priority & Estimated habitats (14th Edition Natural Heritage Atlas, August 1, 2017), there is priority habitat located off-site to the northwest of the Project Site adjacent the bridge over Lake Quinsigamond / Flint Pond. It is possible that priority habitat may be impacted by the off-site roadway work to be constructed along Route 20. More information will be provided in the DEIR.**

(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)

B. Does the project require any state permits related to **rare species or habitat**? ___ Yes **X** No

C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? ___ Yes **X** No.

D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

WETLANDS, WATERWAYS, AND TIDELANDS

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? ___ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? **X** Yes ___ No; if yes, specify which permit: **Order of Conditions**

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

- A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? Yes ___ No; if yes, has a Notice of Intent been filed? ___ Yes No; if yes, list the date and MassDEP file number: _____; if yes, has a local Order of Conditions been issued? ___ Yes ___ No; Was the Order of Conditions appealed? ___ Yes ___ No. Will the project require a Variance from the Wetlands regulations? ___ Yes No.
- B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

The Project Site includes jurisdictional wetland resource areas consisting of Bank, Bordering Vegetated Wetland, Land Under Waterbodies and Waterways and Bordering Land Subject to Flooding. The Project will avoid impacts to wetland resource areas to the extent practicable and comply with all applicable WPA regulations. The Proponent will be seeking approval from the Shrewsbury Conservation Commission for impacts the wetland buffers. Construction controls and best practices will be implemented throughout the Project Site to avoid temporary or secondary impacts to wetland resource areas.

- C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

<u>Coastal Wetlands</u>	<u>Area (square feet) or Length (linear feet)</u>	<u>Temporary or Permanent Impact?</u>
-------------------------	---	---

See response to Section II (B) above.

Land Under the Ocean	<u>N/A</u>	<u>N/A</u>
Designated Port Areas	<u>N/A</u>	<u>N/A</u>
Coastal Beaches	<u>N/A</u>	<u>N/A</u>
Coastal Dunes	<u>N/A</u>	<u>N/A</u>
Barrier Beaches	<u>N/A</u>	<u>N/A</u>
Coastal Banks	<u>N/A</u>	<u>N/A</u>
Rocky Intertidal Shores	<u>N/A</u>	<u>N/A</u>
Salt Marshes	<u>N/A</u>	<u>N/A</u>
Land Under Salt Ponds	<u>N/A</u>	<u>N/A</u>
Land Containing Shellfish	<u>N/A</u>	<u>N/A</u>
Fish Runs	<u>N/A</u>	<u>N/A</u>
Land Subject to Coastal Storm Flowage	<u>N/A</u>	<u>N/A</u>

<u>Inland Wetlands</u>		
Bank (lf)	<u>N/A</u>	<u>N/A</u>
Bordering Vegetated Wetlands	<u>N/A</u>	<u>N/A</u>
Isolated Vegetated Wetlands	<u>N/A</u>	<u>N/A</u>
Land under Water	<u>N/A</u>	<u>N/A</u>
Isolated Land Subject to Flooding	<u>N/A</u>	<u>N/A</u>
Bordering Land Subject to Flooding	<u>N/A</u>	<u>N/A</u>
Riverfront Area	<u>N/A</u>	<u>N/A</u>

- D. Is any part of the project:
1. proposed as a **limited project**? ___ Yes No; if yes, what is the area (in sf)? _____
 2. the construction or alteration of a **dam**? ___ Yes No; if yes, describe:

3. fill or structure in a **velocity zone** or **regulatory floodway**? ___ Yes **X** No
4. dredging or disposal of dredged material? ___ Yes **X** No; if yes, describe the volume of dredged material and the proposed disposal site:
5. a discharge to an **Outstanding Resource Water (ORW)** or an **Area of Critical Environmental Concern (ACEC)**? ___ Yes **X** No
6. subject to a wetlands restriction order? ___ Yes **X** No; if yes, identify the area (in sf):
7. located in buffer zones? **X** Yes ___ No; if yes, how much (in sf) **Approx. 3.6 Acres**

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw? ___ Yes **X** No
2. alter any federally-protected wetlands not regulated under state law? ___ Yes **X** No; if yes, what is the area (sf)?

III. Waterways and Tidelands Impacts and Permits

A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? ___ Yes **X** No; if yes, is there a current Chapter 91 License or Permit affecting the project site? ___ Yes ___ No; if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands:

IV. Consistency:

A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? ___ Yes **X** No; if yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management:

B. Is the project located within an area subject to a Municipal Harbor Plan? ___ Yes **X** No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? ___ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **water supply**? ___ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

WASTEWATER SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? ___ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? ___ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? X Yes ___ No; if yes, specify, in quantitative terms:

11.03(6)(b)(15): Construction of 300 or more New parking spaces at a single location.

11.03(6)(a)(6): Generation of 3,000 or more New adt on roadways providing access to a single location

B. Does the project require any state permits related to **state-controlled roadways**? X Yes ___ No; if yes, specify which permit:

The Project requires a Vehicular Access Permit from MassDOT.

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Number of parking spaces	<u>0</u>	<u>1,240</u>	<u>1,204</u>
Number of vehicle trips per day*	<u>0</u>	<u>11,696</u>	<u>11,696</u>

*ITE Trip Generation Manual 10th Edition, 2017

Land Use Codes (LUC Codes): **LUC 221 – Multifamily Housing (Mid-Rise), LUC 820 – Shopping Center, LUC 850 – Supermarket**

B. What is the estimated average daily traffic on roadways serving the site?

<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
1. <u>Route 20*</u>	<u>22,400</u>	<u>4,910</u>	<u>27,310</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____

* ATR data from January 2019, count taken west of Lake Street, rounded to the nearest 100 vehicles per hour

A. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

Mitigation measures will be addressed in the comprehensive Transportation Impact Assessment ("TIA"), per MassDOT guidance to be provided in the DEIR.

B. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

The Proponent will develop and present TDM measures to promote alternate modes of transportation and to reduce travel during peak hours in the TIA to support the DEIR.

E. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? X Yes ___ No; if yes,

describe if and how will the project will participate in the TMA:

The MetroWest/495 TMA (the "TMA") serves the Town of Shrewsbury. As appropriate, the Proponent will coordinate TDM measures with the TMA.

- F. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? ___ Yes **X** No; if yes, generally describe:
- G. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

Not applicable.

III. Consistency

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

The Proponent will develop a TDM plan that seeks to reduce vehicle trip generation and promote alternative modes of transportation, consistent with Federal and Massachusetts plans and policies.

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds

- A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? ___ Yes **X** No; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **roadways or other transportation facilities**? ___ Yes **X** No; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

ENERGY SECTION

I. Thresholds / Permits

- A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))? ___ Yes **X** No; if yes, specify, in quantitative terms:
- B. Does the project require any state permits related to **energy**? ___ Yes **X** No; if yes, specify which permit:
- C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

AIR QUALITY SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? ___ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **air quality**? ___ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? ___ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**? ___ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Have you consulted with the Massachusetts Historical Commission? ___ Yes **X** No; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? ___ Yes **(N/A)** No; if yes, attach correspondence

Consultation with the MHC for this property occurred in 2005-2006 during review for a previous project (MHC RC.27355). Archaeological investigations identified three sites with potential for additional artifacts (Quinsigamond I, II, and III). The project at the time was designed to avoid these three sites, and MHC suggested measures to avoid potential damage to these sites during construction. Those measures will be implemented by the Proponent. Refer to Attachment 5 for additional details.

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes **X** No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? ___ Yes ___ No; if yes, please describe:

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? **X** Yes ___ No; if yes, does the project involve the destruction of all or any part of such archaeological site? (unknown) Yes ___ No; if yes, please describe:

D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and**

Certifications Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

II. Impacts

Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

There are five previously-recorded archaeological sites on or proximate to the Project Site:

**19-WR-818
19-WR-826
19-WR-823
19-WR-817
19-WR-825**

Consultation with the MHC for this property occurred in 2005-2006 during review for a previous project (MHC RC.27355). Archaeological investigations identified three sites with potential for additional artifacts (Quinsigamond I, II, and III). The project at the time was designed to avoid these three sites, and MHC suggested measures to avoid potential damage to these sites during construction. Those measures will be implemented by the Proponent. Refer to Attachment 5 for additional details. Additional site and construction plans showing project elements in relation to the archaeological sites will be provided to MHC and appropriate stakeholders separately.

III. Consistency

Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

The filing of this ENF for review under MEPA will initiate MHC review of the Project, in order to evaluate potential direct or indirect impacts to properties listed in, or eligible for listing in, the National and State Registers of Historic Places, in compliance with MEPA and the State Register Review requirements (M.G. L. Chapter 9, Sections 27-27c, as amended by Chapter 254 of the Acts of 1988). Should a federal undertaking be identified, the Proponent will also consult with MHC and the Shrewsbury Historical Commission in compliance with Section 106 of the National Historic Preservation Act, pursuant to the guidelines in 36 CFR 800.

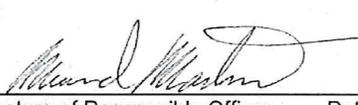
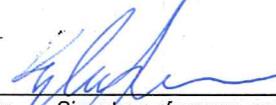
CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

(Name) Worcester Telegram & Gazette (Date) 06-19-18

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

<u>6/14/19</u>			
Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing ENF (if different from above)
<u>Normand Martin</u>		<u>Kyle Greaves</u>	
Name (print or type)		Name (print or type)	
<u>DSM Realty, Inc.</u>		<u>VHB</u>	
Firm/Agency		Firm/Agency	
<u>881 East Street</u>		<u>99 High Street, 10th Floor</u>	
Street		Street	
<u>Tewksbury, MA 01876</u>		<u>Boston, MA 02110</u>	
Municipality/State/Zip		Municipality/State/Zip	
<u>978-749-3900</u>		<u>617-607-2988</u>	
Phone		Phone	

Attachment 1: Alternatives Analysis and Regulatory Context

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1

Alternatives Analysis and Regulatory Context

This chapter provides an analysis of the alternatives to the Project that were considered, as well as regulatory context for the Project.

1.1 Project Alternatives

This section provides an analysis of project alternatives previously considered As-of-Right Alternative, and the Preferred Alternative. We anticipate that a more detailed quantitative and qualitative comparison of alternatives will be provided as part of the forthcoming DEIR.

In addition to zoning, site constraints limit the design of the Project, including impervious area, natural resources, and water quality. No alternative land uses other than those proposed in the Project have been or are being considered due to the development objectives set forth by the Proponent, and the Town of Shrewsbury.

1.1.1 Description of Development Alternatives

The following section provides a description and evaluation of the project alternatives that were considered in the site design process in order to work towards the goals and intentions of the Proponent, as well as the As-of-Right Alternative. Table 1-1 below compares the Project alternatives.

Table 1-1 Project Build Alternatives

	As-of-Right Alternative	Preferred Alternative
Approx. Building Floor Area	437,500 SF	427,500 SF
Super Market Use	0 SF	80,000 SF
General Retail/Restaurant Uses	357,500 SF	65,000 SF
Office Use	80,000 SF	-0-
Residential Use	-0- SF / (0 Units)	282,500 SF / (250 Units)
Parking Spaces	Up to 2,088 Spaces	Up to 1,204 Spaces

No Build Alternative

The No-Build Alternative would maintain the existing conditions at the Project Site, leaving in place the abandoned drive-in theater set on an overgrown vacant lot and pavement, as shown on Figure 2. Although the No-Build Alternative would not result

in any new impacts, it would eliminate the Proponent's ability to provide the environmental and community benefits inherent in the proposed development, particularly with respect to redevelopment of a vacant site, new landscaping, as well as new shopping opportunities, increased tax revenue and creation of new jobs and housing. Under the No-Build Alternative, the majority of the Site would remain in its previously disturbed state with limited or no stormwater management systems to provide treatment of pavement runoff that currently discharges untreated into the Flint Pond via the former drive-in and Route 20 drainage systems. While the No-Build Alternative is not considered a viable option for the Site, it is used to establish the existing and future No-Build "baseline" conditions for the technical analyses of this ENF.

As-of-Right Alternative

The As-of-Right Alternative contemplates approximately 437,500 SF of development, including a three-story general retail building and an 80,000 SF office building with 2,088 surface parking spaces that could be constructed as-of-right under the existing zoning. Despite the opportunity for significantly more developed building area, the Proponent abandoned this option, as the increased parking, impervious area, and traffic impacts are undesirable from a budgetary and environmental impact perspective.

Preferred Alternative

The Preferred Alternative (or the Project), as described in detail in the ENF Form, and shown on Figure 4, proposes approximately 427,500 SF of development, including the construction of a new Market Basket supermarket and general retail space, and up to 250 units of rental housing (including affordable housing) with up to 1,204 surface parking spaces. The Preferred Alternative provides a more diverse mix of uses that will complement and support the surrounding land uses by providing resources, new retail opportunities, new jobs and new housing for the surrounding population. The Preferred Alternative also provides a more efficient site layout with reduced impervious area and enhanced landscaping, which will positively impact the marketability of the Project.

As will be discussed in greater detail in the subsequent DEIR filing, the Proponent is committed to mitigating impacts associated with the Preferred Alternative.

1.1.2 Qualitative and Quantitative Comparison of Alternatives

This section provides a quantitative and qualitative analysis of the potential environmental impacts of the Project alternatives. Table 1-2 below compares these impacts of the No-Build Alternative, As-of-Right Alternative, and Preferred Alternative. (Note: stormwater management is not compared across the Project alternatives as all, except the No-Build Alternative, would be designed to fully comply with MassDEP Stormwater Management Standards.)

Table 1-2 Quantitative Comparison of Project Alternatives

Impact Category	No-Build Alternative	As-of-Right Alternative	Preferred Alternative
Land			
Approx. Size of Project Site	68 acres	68 acres	68 acres
Total Building Footprint Area	-0-	437,500 SF	427,500 SF
Total Impervious Surface Area	14.5 acres	32 acres	23 acres
New Land Alteration	-0-	51 acres	41 acres
Water & Wastewater			
Water Use (GPD)	-0-	±58,036 GPD	±57,825 GPD
Wastewater Generation (GPD)	-0-	±52,760 GPD	+52,568 GPD
Transportation			
New Daily Vehicle Trips (Unadjusted)	-0-	15,150	11,700
Parking			
Total Surface Parking Spaces	N/A ¹	2,088	1,204
SF	square feet		
GPD	gallons per day		
1	The existing site for the former drive-in theater is now predominantly broken asphalt, and there are no striped parking spaces provided or remaining associated with the former drive-in theater.		

Land Alteration

While buildable by-right (i.e., no zoning changes or use variances required), the As-Of-Right Alternative would increase the building footprint compared to the Preferred Alternative. A larger surface parking supply would be required to support the more intensive development program (by approximately 884 spaces) resulting in more overall impervious area (by approximately nine (9) acres) compared to the Preferred Alternative. As mentioned above, the increase in impervious area is undesirable from a budgetary and environmental impact perspective and, therefore, the As-of-Right Alternative will not be pursued.

Transportation and Parking

As a more intensive development, the As-Of-Right Alternative would generate approximately 3,450 more unadjusted vehicle trips per day (or a 29 percent increase) compared to the Preferred Alternative. To construct a marketable project, the As-Of-Right Alternative would require approximately 2,088 parking spaces, an increase of approximately 884 spaces over the Preferred Alternative.

As currently designed, the Project does not contain excess parking spaces. The parking supply for the Preferred Alternative is based on a combination of the Town of Shrewsbury's zoning requirements and market demands, and employs shared parking credits wherever appropriate.

A parking garage as an alternative to surface parking would not be feasible for any of the alternatives. Additionally, structured parking would be difficult to manage with shopping carts and financially infeasible.

Greenhouse Gas Emissions

While not quantified, the As-of-Right Alternative is a more intensive development with larger buildings and more developed square footage, and therefore is expected to generate more overall stationary and mobile source GHG emissions compared to the Preferred Alternative.

Conclusion

Overall, the Preferred Alternative achieves the development objectives of the Proponent, avoids and reduces environmental impacts compared to the As-of-Right Alternative, and provides maximum public benefits. Based on an analysis of existing Project Site characteristics, development costs, and mitigation requirements, the Proponent did not identify a practical alternative that would significantly reduce the environmental impacts of the development while still meeting the goals of the Project, and the Town of Shrewsbury.

The larger development program of the As-Of-Right Alternative would result in increased parking and impervious area, along with increased traffic, which is undesirable from an environmental impact perspective. Consequently, the Preferred Alternative is carried forward for further analysis in this document as the Project.

1.2 Regulatory Context

1.2.1 Anticipated Permits and Approvals

Table 1-3 lists the permits and approvals from federal, state and local governmental agencies, that are anticipated to be required by the Project. It is possible that only some of the permits and approvals identified in the table below will be required. In addition, other permits and approvals may be identified in the course of approval of the Project.

Table 1-3 Anticipated Project Permits and Approvals

AGENCY	PERMIT/APPROVAL
Federal	
Environmental Protection Agency (EPA)	National Pollutant Discharge Elimination System (NPDES) Construction General Permit
Commonwealth of Massachusetts	
Executive Office of Housing and Economic Development	MassWorks Infrastructure Program
Executive Office of Energy and Environmental Affairs (EEA)	Certificate Evidencing Completion of MEPA Review
Massachusetts Department of Transportation (MassDOT)	Highway Access Permit
Town of Shrewsbury	
Shrewsbury Planning Board	Special Permit through Route 20 Overlay District Site Plan Approval
Shrewsbury Conservation Commission	Order of Conditions

1.2.2 Town of Shrewsbury Zoning

The Project Site is located within the Town of Shrewsbury's Commercial-Business Zoning District which allows for a wide range of commercial and business uses by-right, which are intended to provide goods and services. The Project Site is also located in the Route 20 Overlay District, which is intended to encourage economic development by providing increased flexibility to attract a complementary mix of office, retail, and compatible light industrial uses.

The Project will complement and support the surrounding land uses by providing resources, new retail opportunities, new jobs and new housing (including affordable housing) for the surrounding population. The Project will also attract a complementary mix of commercial and residential uses that provide an economic and fiscal benefit to the Town, as well as kickstarting the Town's desired redevelopment of the Route 20 Corridor.

1.2.3 Massachusetts Environmental Policy Act

The Project is subject to review pursuant to MEPA because the proposed development requires one or more state agency permits and exceeds review thresholds established under the MEPA implementing regulations (301 CMR 11.03). These thresholds are:

- › 11.03(1)(b)(2): Creation of five or more acres of impervious area;
- › 11.03(1)(b)(1): Direct alteration of 25 or more acres of land
- › 11.03(6)(a)(6): Generation of 3,000 or more New adt on roadways providing access to a single location; and
- › 11.03(6)(a)(7): Construction of 1,000 or more New parking spaces at a single location.

As a result of the state financial assistance provided through the MassWorks grant, MEPA jurisdiction is broad, and shall extend to all aspects of a Project that are likely, directly or indirectly, to cause damage to the environment including traffic and transportation, greenhouse gas emissions and air quality, wetlands, and stormwater.

1.2.4 MassWorks Infrastructure Grant

In August 2018, the Town of Shrewsbury applied for a MassWorks Infrastructure Grant in the amount of \$4.4 million for the upgrade of the Route 20 (Hartford Turnpike) near the Project Site.

The grant is intended to upgrade approximately 3,300 feet of the Route 20 corridor starting at the bridge over Lake Quinsigamond / Flint Pond and heading eastward to the intersection with Purinton Street. It is intended to provide full depth reconstruction for the majority of this length, a new traffic signal at the intersection of Lake Street and Route 20, along with sidewalk and bicycle accommodations in accordance with the Commonwealth's Complete Streets Policy. Roadway widenings and capacity upgrades are sought at a number of intersections within this area and stormwater improvements are considered along the corridor as well. The primary focus of the assistance is to help in the Town's goals of development and re-development of sites, especially the former Edgemere Drive-In movie theater site, as well as support other future and existing retail and housing projects, addressing many long-standing roadway infrastructure needs, and upgrade congested intersections along the corridor.

In November 2019, the Commonwealth awarded \$3.75 million towards the advancement of this project with the Town and the Project Proponent working collaboratively to provide for right of way, design funding, and other elements of the project not covered by the Grant. The MassWorks roadway project mitigates the impacts of the Project, and also includes additional improvements desired by the Town of Shrewsbury in accordance with its master plan for the region.

Attachment 2: Supporting ENF Figures

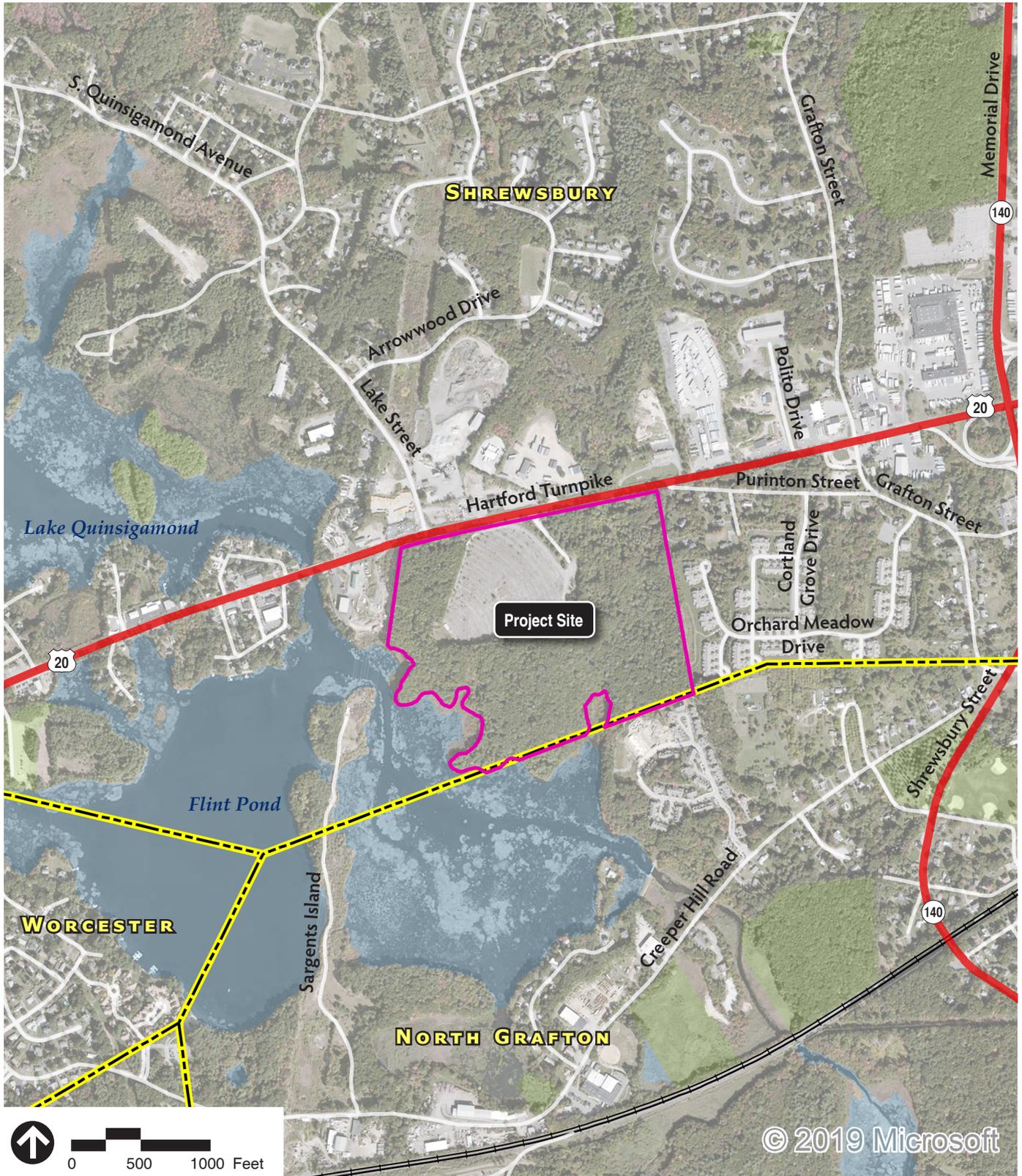


Source: USA Topo Maps



Figure 1
Site Location Map

**Edgemere Crossing at Flint Pond
Shrewsbury, Massachusetts**

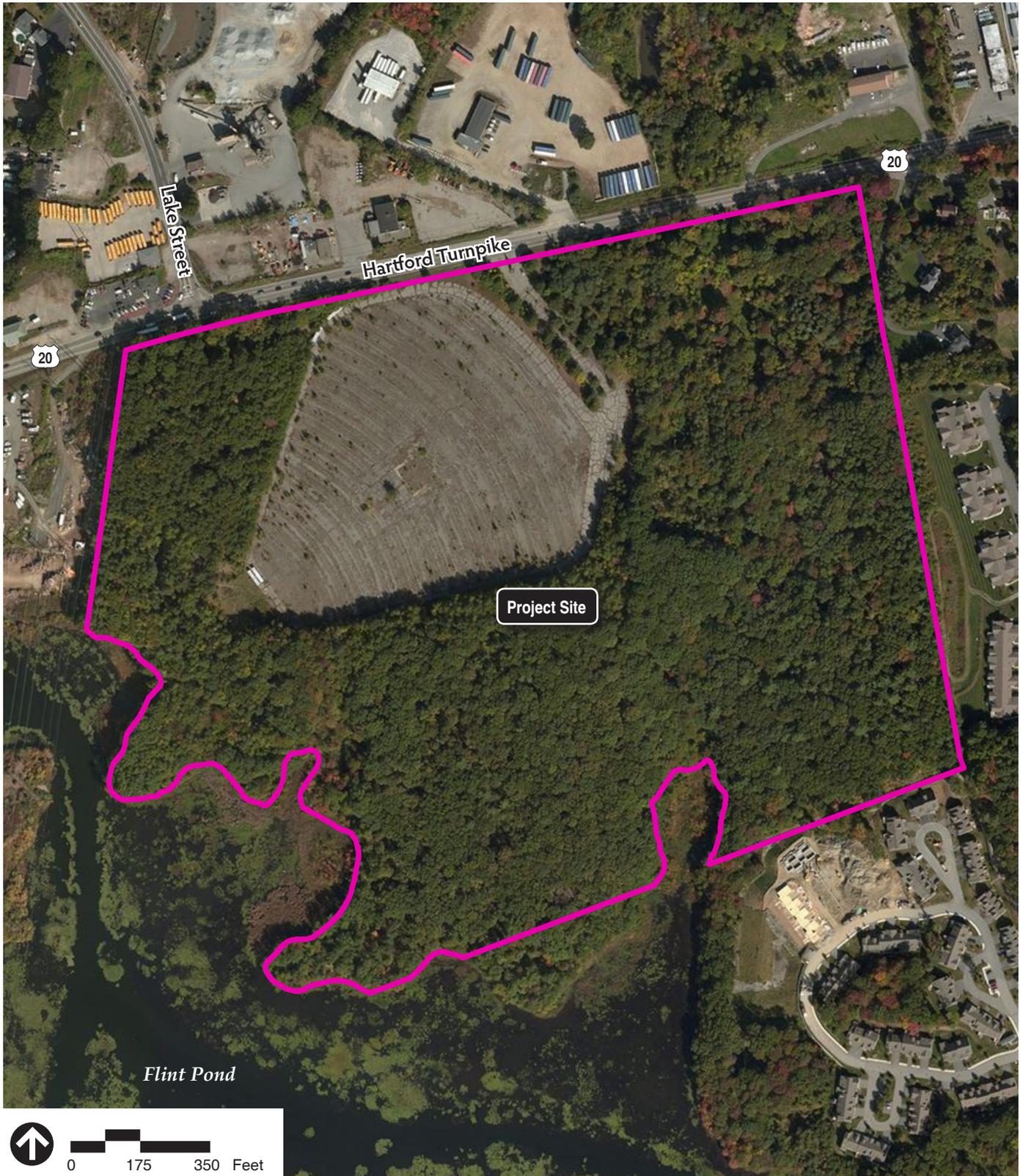


Source: MassGIS



Figure 2
Project Site Context

**Edgemere Crossing at Flint Pond
Shrewsbury, Massachusetts**



Source: MassGIS



Figure 3
Existing Conditions Plan

**Edgemere Crossing at Flint Pond
Shrewsbury, Massachusetts**

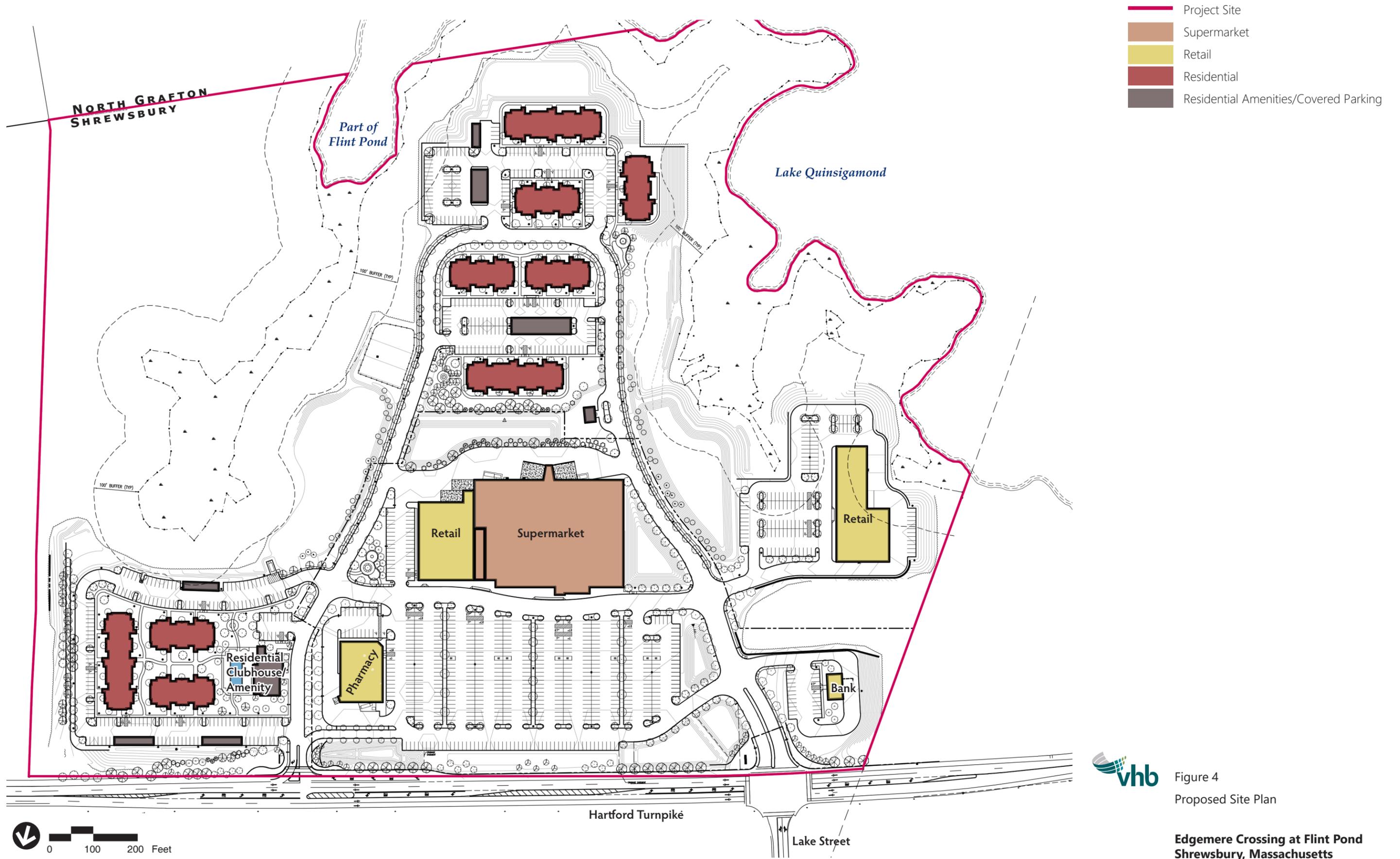
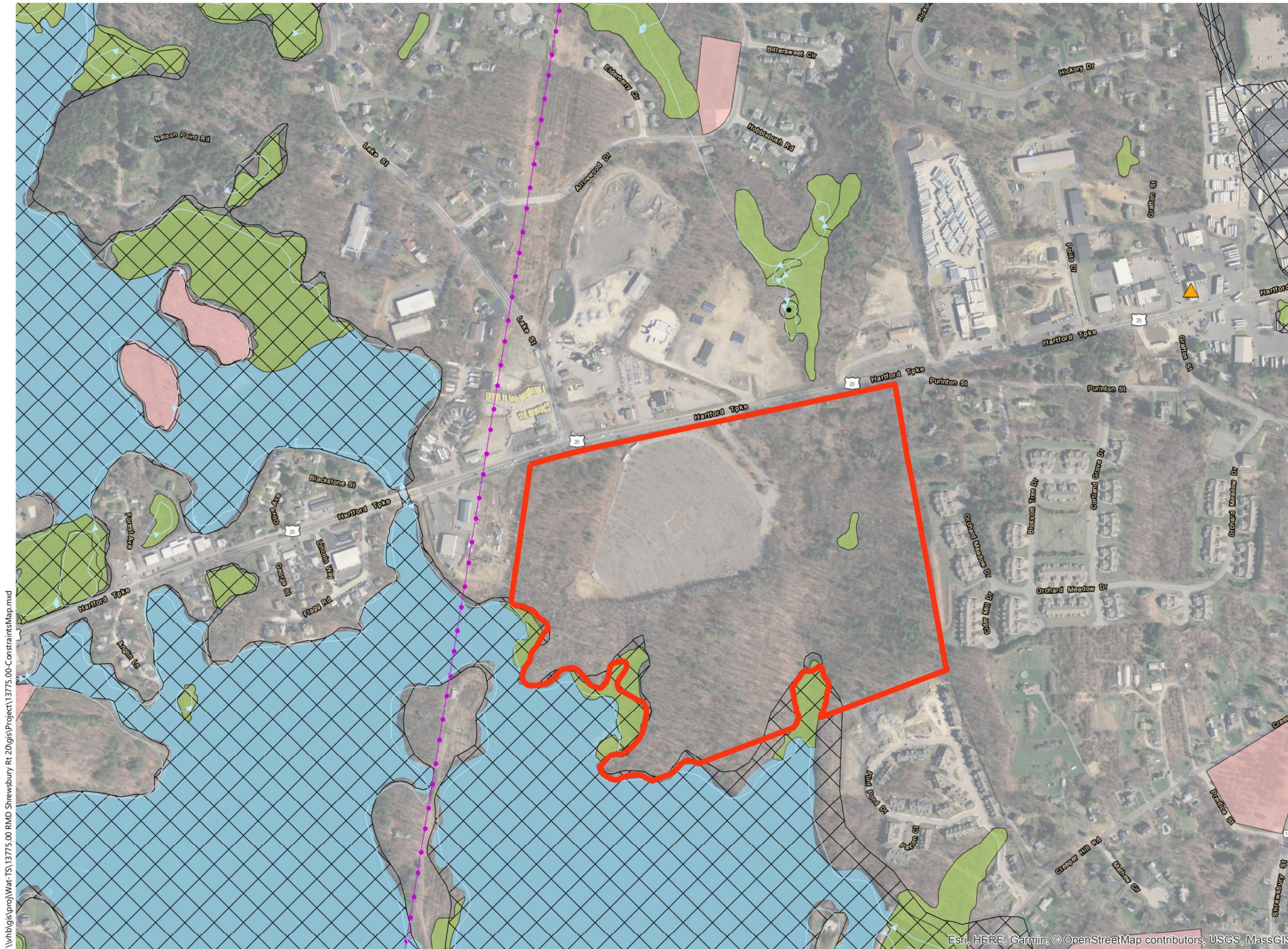


Figure 4
Proposed Site Plan



- Project Site
 - NHD Flowline
 - Powerline
 - NHESP Potential Vernal Pools
 - ▲ Underground Storage Tanks
- 100 Year Floodplain**
- ▨ 100 Year Floodplain
- DEP Wetlands**
- Wetland Type**
- DEP Wetlands
 - Open Water
 - Protected and Recreational Open Space

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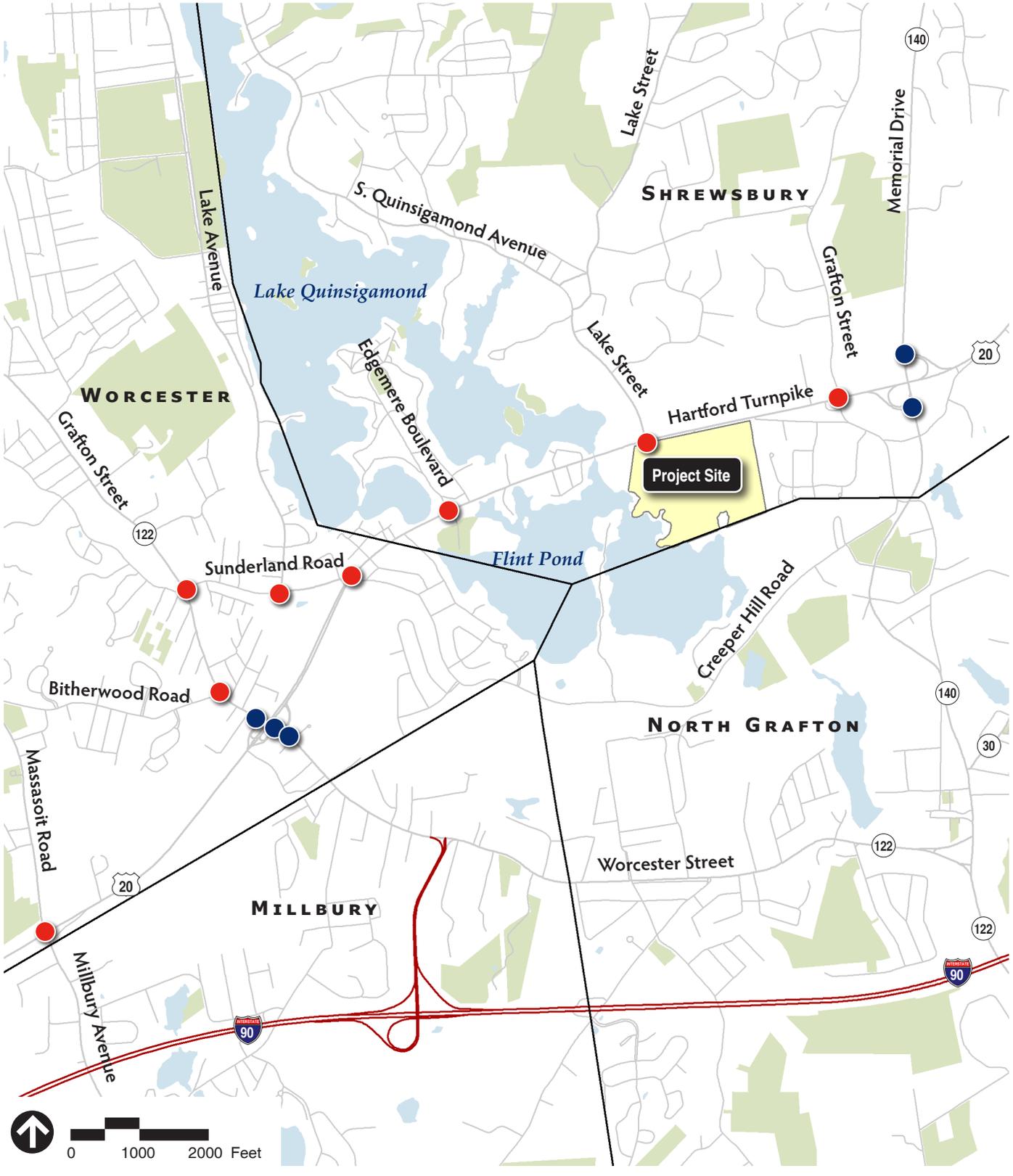
Esri, HERE, Garmin, © OpenStreetMap contributors, USGS, MassGIS

Data Source: Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, MassIT



Figure 5
MassGIS Environmental Constraints Map

**Edgemere Crossing at Flint Pond
Shrewsbury, Massachusetts**



Source: MassGIS

- Signalized Intersection
- Unsignalized Intersection



Figure 6
Study Area Intersections

**Edgemere Crossing at Flint Pond
Shrewsbury, Massachusetts**

Attachment 3: Transportation Scoping Letter



June 17, 2019

Ref: 13775.00

J. Lionel Lucien, PE
Manager, Public/Private Development Unit
Office of Transportation Planning
10 Park Plaza, Room 4150
Boston, MA 02116

Re: Transportation Scoping Letter (TSL)
Edgemere Crossing at Flint Pond
Route 20 (Hartford Turnpike)
Shrewsbury, MA

Dear Mr. Lucien,

On behalf of the Route 20 Nominee Trust and Demoulas Super Markets, Inc. (collectively the "Proponent"), VHB has prepared this Transportation Scoping Letter (TSL) to outline the technical assumptions and key transportation issues that will be addressed in the Transportation Impact Assessment ("TIA") for the above referenced Project to be provided as part of the Draft Environmental Impact Report ("DEIR"). The TSL has been prepared in accordance with the Massachusetts Department of Transportation ("MassDOT") Transportation Impact Assessment Guidelines. This letter is being submitted with the Environmental Notification Form ("ENF") to provide an opportunity for others to comment on the extent and information provided. The suggested scope outlined below was developed based on VHB's experience in this area, and initial consultation with the Town of Shrewsbury.

Background

The site is located on an approximately ±68-acre parcel along Route 20 in Shrewsbury, Massachusetts (the "Project Site"). The Project Site was formerly the site of the Edgemere Drive-In movie theater, and has been inactive for over 20 years. The Project Site is generally bounded by Route 20 to the north, existing residential development to the east and southeast, the North Grafton line to the south and southwest, and Flint Pond to the west. The Proponents propose the construction of a mixed-use development of approximately 427,500 square feet (SF); consisting of a new Market Basket Super Market (approximately 80,000 SF), general retail space (approximately 65,000 SF), and 250 rental residential units (approximately 282,500 SF). The Project also includes construction of new utility service connections, construction of a stormwater management system, installation of landscaping, construction of Site improvements and parking facilities, and improved Project Site access off of Route 20.

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Engineers | Scientists | Planners | Designers



Access to the Project Site will be provided via an unsignalized driveway that restricts left-turns out along Route 20 in the general location of the Project Site's current driveway and a signalized full-access driveway at the intersection of Route 20 and Lake Street. An internal connection between all areas of the Project Site will be provided. Refer to Figure 1 in Attachment 2 for a Site location map.

Review Thresholds

Based on Section 11.03.06.b of the Massachusetts Environmental Policy Act (MEPA) Regulations, the Project exceeds the following thresholds and will require the preparation of an Environmental Impact Report (EIR):

- › 301 CMR 11.03(6)(a)(6) – Generation of 3,000 or more new ADT by motor vehicles on roadways providing access to a single location.
- › 301 CMR 11.03(6)(a)(7): Construction of 1,000 or more New parking spaces at a single location.

A Highway Access Permit is required from Massachusetts Department of Transportation (MassDOT) as the Project Site abuts a state highway (Route 20/Hartford Avenue) with direct access being proposed on this roadway as part of the development proposal.

The Proponent plans to include a TIA as an attachment to the DEIR. This TSL has been prepared for MassDOT review prior to the preparation of the TIA to seek input and concurrence on the TIA assumptions.

Trip Generation

Site-generated traffic volumes estimates were developed based on data provided the Institute of Transportation Engineers (ITE) Trip Generation¹. Specifically, ITE land use codes (LUC) 820 (Shopping Center), 850 (Supermarket), 221 (Multifamily Housing (Mid-Rise)) were used in the calculations.

It should be noted that not all trips associated with the proposed Project will represent "new" traffic added to the study area roadways. A portion of the vehicle trips generated will be drawn from the existing traffic passing the Project Site in the form of pass-by traffic. A pass-by trip percentage of 25 percent, 34 percent and 26 percent was used for the weekday morning, weekday afternoon and Saturday midday peak hours, respectively, which is in accordance with MassDOT TIA guidelines. The trip generation projections are summarized in Table 1.

Additionally, because the Project proposes a mix of uses, the trip generation characteristics of the Project Site will be different from a single-use project. Some of the traffic to be generated by the Project will be contained on the Site as "internal" or "shared vehicle" trips. For example, residents may also visit the general retail on the Project Site. While these shared trips represent new traffic to the individual uses, they would not show up as new vehicle trips on the surrounding roadway network.

¹ Trip Generation: Tenth Edition; Institute of Transportation Engineers (ITE); Washington D.C.; 2017



To account for shared trips between the proposed uses, the shared trip methodology outlined in the ITE Trip Generation Handbook, 2nd Edition was applied.

Table 1 Vehicle Trip Generation Summary

Time Period	Movement	Total Trips	Pass-by Trips	Internal Capture	New Trips
Weekday Daily ^a	Enter	5,848	1,232	482	4,134
	Exit	<u>5,848</u>	<u>1,232</u>	<u>482</u>	<u>4,134</u>
	Total	11,696	2,464	964	8,268
Weekday Morning Peak Hour ^b	Enter	267	51	1	215
	Exit	<u>222</u>	<u>51</u>	<u>1</u>	<u>170</u>
	Total	489	102	2	385
Weekday Evening Peak Hour ^b	Enter	556	165	48	343
	Exit	<u>533</u>	<u>165</u>	<u>48</u>	<u>320</u>
	Total	1,089	330	96	663
Saturday Daily ^a	Enter	10,183	2,346	418	7,419
	Exit	<u>10,183</u>	<u>2,346</u>	<u>418</u>	<u>7,419</u>
	Total	20,366	4,692	836	14,838
Saturday Midday ^b	Enter	635	137	49	449
	Exit	<u>607</u>	<u>137</u>	<u>49</u>	<u>421</u>
	Total	1,242	274	98	870

a vehicles per day
 b vehicles per hour

Trip Distribution

The directional distribution of traffic approaching and departing the Site is a function of several variables. These include population densities, existing travel patterns, and the efficiency of the roadways leading to and from the Project Site. The trip distribution for the residential uses is based on 2010 Census data and for the retail/supermarket uses is based on existing observed travel patterns. The anticipated trip distribution patterns for the Project are summarized in Table 2.



Table 2 Trip Distribution Summary

Major Roadway	Direction (From/To)	% Site Traffic (Residential)	% Site Traffic (Retail/Supermarket)
Route 20	West	8%	14%
Massasoit Road	South	0%	3%
Route 122	South	10%	15%
Route 122	North	10%	10%
Lake Avenue	North	0%	8%
Lake Street	North	23%	5%
Route 140	North	19%	10%
Route 140	South	1%	10%
Route 20	East	<u>29%</u>	<u>21%</u>
	Total	100%	100%

Mode Split

A preliminary review of available information notes that there is limited public transportation service available in the vicinity of the Project Site. The nearest public transit service in the area is the Grafton Commuter Rail Station (over 4.5 miles from the Project Site), which is part of the Worcester Line and is provided by the Massachusetts Bay Transportation Authority (MBTA). Bus service is provided by the Worcester Regional Transit Authority (WRTA) along Route 9 to the north of the Project Site and is not expected to offer any real benefit to this Project Site. While it is possible that some of the residents, employees or visitors to the Project Site could use public transportation, the trip generation estimates for this Project will likely not be overly influenced by these services.

During the preparation of the TIA, census mode split data will be reviewed to determine if any vehicle trip reductions due to the use of other services or pedestrian/bicycle modes can be justified and how an effective TDM program might also help to shift motorists out of a single occupant mode.

Transportation Demand Management

The TIA will include a Travel Demand Management (TDM) plan for the Project that leverages the limited existing services in the area. It will also seek to identify enhancements to pedestrian and bicycle accommodations that will be proposed on the Project Site to promote alternate modes of transportation and to reduce travel during peak hours and to reduce the number of single occupant vehicles arriving and departing from the Project Site. At a minimum, the Proponents will work with MassRIDES and the local Transportation Management Association (TMA) to provide services to the residents and employees at the Project Site. Similarly, the Applicants will work with the Town of Shrewsbury to identify opportunities to work with the elderly population and potentially provide shuttle services between their place of residence and the supermarket, restaurant, and retail facilities on the Project Site.



Study Area Network & Analysis Periods

Based on the foregoing preliminary data, VHB identified the locations shown in Figure 6 in Attachment 2 and Table 3 below, in addition to the two Project Site driveways, for inclusion in the traffic analyses. The TIA for the Project will focus on the weekday morning, evening and Saturday midday peak hours. Traffic count data was collected between 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM on a typical weekday and between 11:00 AM -2:00 PM on a typical Saturday and will be used in the analysis.

Table 3 Study Area Intersections

Study Locations	
1	Route 20 at Massasoit Road/Millbury Avenue
2	Route 20 eastbound ramps at Route 122 (Grafton Street) (east intersection)
3	Route 20 eastbound ramps at Route 122 (Grafton Street) (west intersection)
4	Route 20 westbound ramps at Route 122 (Grafton Street)
5	Route 122 (Grafton Street) at Blithewood Avenue
6	Route 122 (Grafton Street) at Sunderland Road
7	Sunderland Road at Lake Avenue
8	Route 20 at Sunderland Road/Westborough Street
9	Route 20 at Edgemere Boulevard
10	Route 20 at Grafton Street
11	Route 20 eastbound ramps at Route 140 (Memorial Drive)
12	Route 20 westbound ramps at Route 140 (Memorial Drive)
13	Route 20 at Lake Street/Site Driveway (west)
14	Route 20 at Site Driveway (east)



Safety

VHB reviewed vehicle crash data available from MassDOT for the suggested study area intersections. This research indicates that the following intersections are listed as 2014-2016 Highway Safety Improvement Program (HSIP) locations:

- › Route 20 at Grafton Street;
- › Route 20 at Sunderland Road/Westborough Street; and
- › Route 20 at Massasoit Road.

The Proponents will coordinate with the MassDOT Safety Division regarding these HSIP-eligible locations to determine if a Road Safety Audit (RSA) is required. It should be noted that an RSA was completed by McMahon Associates for the intersection of Route 20 at Grafton Street in April 2015. During the preparation of the TIA, VHB will review the safety issues and potential safety enhancements that were identified in this report.

Site Plan

As previously mentioned, the Project will encompass approximately 427,500 square feet (SF) of mixed-use development, consisting of a new Market Basket Super Market (approximately 80,000 SF), general retail space (approximately 65,000 SF), and approximately 250 rental residential units (approximately 282,500 SF). A preliminary layout of the potential Project components is included in Figure 4 in Attachment 2.

Future access to the Project Site will be provided via a right-out driveway along Route 20 in the general location of the current driveway and a signalized full-access driveway at the intersection of Route 20 and Lake Street. An internal connection between all areas of the Project Site will be provided. A more detailed discussion of the planned access improvements, Project Site circulation, and associated changes to the roadway network will be included in the TIA.

Parking

Parking at the Project Site will be provided predominately as surface parking spaces throughout the Project Site. The parking supply will be based on a combination of the Town of Shrewsbury's zoning requirements and market demands, and will seek to employ shared parking credits wherever appropriate. From a zoning and market perspective, the Project will require a minimum of 1,037 spaces to support the residential and commercial uses on the Project Site. The Project currently proposes 1,204 spaces to support the proposed uses. Considering the influence of shared parking opportunities, the proposed parking supply on the Project Site will be further refined through discussions with the Town as part of the site plan review process.

Based on the preliminary information presented in this TSL, we respectfully request your feedback on the TIA scope. If you have any questions or need additional information to review the TSL, please contact me via phone or e-mail.

J. Lionel Lucien, PE
Ref: 13775.00
June 17, 2019
Page 7



Sincerely,

A handwritten signature in black ink, appearing to read "KATH KEEN".

Kathleen Keen
Senior Project Engineer
kkeen@vhb.com
617.607.2970

Trip Generation

TRIP GENERATION INPUTS

Land Use	Size	Units
Residential	250	units
Retail	65.0	ksf
Supermarket	80.0	ksf

TRIP GENERATION SUMMARY

LUC SIZE	Residential ¹			Retail ²				Supermarket ³				Total Gross Trips	Total New Trips	Total Pass-by Trips	Total Internal Capture	
	221 250	Internal Capture ⁴	Net New	820 65.0	Internal Capture ⁴	Pass-by ⁵	Net New	850 80.0	Internal Capture ⁴	Pass-by ⁵	Net New					
Weekday Daily						25%										
Enter	680	224	456	1,735	86	414	1,235	3,442	172	820	2,450	5,857	4,141	1,234	482	
Exit	680	258	422	1,735	75	414	1,246	3,442	149	820	2,473	5,857	4,141	1,234	482	
Total	1,360	482	878	3,470	161	828	2,481	6,884	321	1,640	4,923	11,714	8,282	2,468	964	
Weekday Morning Peak Hour						25%										
Enter	22	-	22	62	-	13	49	183	1	38	144	267	215	51	1	
Exit	62	1	61	38	-	13	25	122	-	38	84	222	170	51	1	
Total	84	1	83	100	-	26	74	305	1	76	228	489	385	102	2	
Weekday Evening Peak Hour						34%										
Enter	65	30	35	154	6	52	96	338	12	114	212	557	343	166	48	
Exit	42	18	24	167	10	52	105	325	20	114	191	534	320	166	48	
Total	107	48	59	321	16	104	201	663	32	228	403	1,091	663	332	96	
Saturday Daily						25%										
Enter	589	194	395	2,515	59	615	1,841	7,105	165	1,738	5,202	10,209	7,438	2,353	418	
Exit	589	224	365	2,515	51	615	1,849	7,105	143	1,738	5,224	10,209	7,438	2,353	418	
Total	1,178	418	760	5,030	110	1,230	3,690	14,210	308	3,476	10,426	20,418	14,876	4,706	836	
Saturday Midday Peak Hour						26%										
Enter	55	25	30	194	8	46	140	388	16	91	281	637	451	137	49	
Exit	57	24	33	179	8	46	125	373	17	91	265	609	423	137	49	
Total	112	49	63	373	16	92	265	761	33	182	546	1,246	874	274	98	

1 Trip generation estimate based on ITE LUC 221 (Mid-Rise Residential), using regression equation

2 Trip generation estimate based on ITE LUC 820 (Retail), using regression equation

3 Trip generation estimate based on ITE LUC 850 (Supermarket), using regression equation, except for weekday morning and Saturday daily average rates were used

4 Internal capture rates for weekday morning and weekday evening based on NCHRP Report 684 and for weekday daily based on ITE Trip Generation Handbook 2nd Edition. Saturday midday rates assumed to be the same as weekday evening rates and Saturday daily rates assumed to be the same as weekday daily.

5 Pass-by rates based on ITE data, assumed to be 25% where no data is available.

SHARED TRIPS¹

RETAL - WEEKEND/DAILY

WEEKDAY ONLY					
RETAL	EXIT ->	IN	EXIT	WALKING	RECREATIONAL
		176	5,171	224	680
	ENTER ->	2,176	5,171	224	680

WEEKDAY MORNING					
RETAL	EXIT ->	IN	EXIT	WALKING	RECREATIONAL
		100	0	22	0
	ENTER ->	245	0	62	0

WEEKDAY EVENING					
RETAL	EXIT ->	IN	EXIT	WALKING	RECREATIONAL
		482	0	85	0
	ENTER ->	482	0	42	0

SATURDAY DAILY					
RETAL	EXIT ->	IN	EXIT	WALKING	RECREATIONAL
		8,620	0	184	589
	ENTER ->	8,620	0	224	589

SATURDAY MORNING					
RETAL	EXIT ->	IN	EXIT	WALKING	RECREATIONAL
		152	0	21	55
	ENTER ->	152	0	24	57

TOTAL SHARED TRIPS - WEEKDAY ONLY		
RETAL	EXIT	TOTAL
RETAL	224	482
RETAL	75	161
SUPERMARK	172	349

TOTAL SHARED TRIPS - WEEKDAY MORNING		
RETAL	EXIT	TOTAL
RETAL	0	1
RETAL	0	0
RETAL	1	1

TOTAL SHARED TRIPS - WEEKDAY EVENING		
RETAL	EXIT	TOTAL
RETAL	0	0
RETAL	6	16
RETAL	12	32

TOTAL SHARED TRIPS - SATURDAY DAILY		
RETAL	EXIT	TOTAL
RETAL	184	418
RETAL	59	110
RETAL	165	330

TOTAL SHARED TRIPS - SATURDAY MORNING		
RETAL	EXIT	TOTAL
RETAL	21	46
RETAL	8	16
RETAL	16	33

¹ Internal capture rates for weekday morning and weekday evening based on NCHRP Report 664 and for weekday daily based on ITE Trip Generation Handbook 2nd Edition. Saturday midday rates assumed to be the same as weekday evening rates and Saturday daily rates assumed to be the same as weekday daily.

ITE TRIP GENERATION WORKSHEET
 (10th Edition, Updated 2017)

LANDUSE: Mid-Rise Residential
LANDUSE CODE: 221 Independent Variable --- Number of Units
SETTING/LOCATION: General Urban/Suburban
JOB NAME: _____ 250 units
JOB NUMBER: _____

WEEKDAY

RATES:	# Studies	R ²	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	27	0.77	5.44	1.27	12.50	205	21	494	50%	50%
AM PEAK OF GENERATOR	48	0.69	0.32	0.06	0.77	225	21	1,168	27%	73%
PM PEAK OF GENERATOR	47	0.66	0.41	0.09	1.26	211	21	1,168	60%	40%
AM PEAK (ADJACENT ST)	53	0.67	0.36	0.06	1.61	207	26	703	26%	74%
PM PEAK (ADJACENT ST)	60	0.72	0.44	0.15	1.11	208	26	703	61%	39%

TRIPS:	BY AVERAGE			BY REGRESSION			LUC 221
	Total	Enter	Exit	Total	Enter	Exit	
DAILY	1,360	680	680	1,361	680	680	
AM PEAK OF GENERATOR	80	22	58	75	20	54	
PM PEAK OF GENERATOR	103	62	41	93	56	37	
AM PEAK (ADJACENT ST)	90	23	67	84	22	62	114 26
PM PEAK (ADJACENT ST)	110	67	43	107	65	42	133 84

SATURDAY

RATES:	# Studies	R ²	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	6	0.73	4.91	4.03	8.51	224	111	336	50%	50%
PEAK OF GENERATOR	8	0.89	0.44	0.34	0.73	264	111	462	49%	51%

TRIPS:	BY AVERAGE			BY REGRESSION			LUC 221
	Total	Enter	Exit	Total	Enter	Exit	
DAILY	1,228	614	614	1,177	589	589	
PEAK OF GENERATOR	110	54	56	112	55	57	175 86

SUNDAY

RATES:	# Studies	R ²	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	6	--	4.09	3.06	8.41	224	111	336	50%	50%
PEAK OF GENERATOR	6	--	0.39	0.26	1.07	224	111	336	62%	38%

TRIPS:	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit

ITE TRIP GENERATION WORKSHEET

(10th Edition, Updated 2017)

LANDUSE: Supermarket
LANDUSE CODE: 850
SETTING/LOCATION: General Urban/Suburban
JOB NAME:
JOB NUMBER:

Independent Variable --- 1,000 Sq. Feet Gross Floor Area

FLOOR AREA (KSF): 80.0

WEEKDAY

RATES:	# Studies	R ²	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	5	0.7	106.78	68.67	170.24	34	10	55	50%	50%
AM PEAK OF GENERATOR	15	0.59	6.67	2.28	12.68	45	10	150	52%	48%
PM PEAK OF GENERATOR	13	0.59	7.60	4.55	18.63	51	10	150	52%	48%
AM PEAK (ADJACENT ST)	14	--	3.82	1.17	9.35	40	10	70	60%	40%
PM PEAK (ADJACENT ST)	73	0.57	9.24	3.53	20.30	55	10	150	51%	49%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	8,542	4,271	4,271	6,884	3,442	3,442
AM PEAK OF GENERATOR	534	277	256	492	256	236
PM PEAK OF GENERATOR	608	316	292	508	264	244
AM PEAK (ADJACENT ST)	306	183	122	N/A	N/A	N/A
PM PEAK (ADJACENT ST)	739	377	362	663	338	325

SATURDAY

RATES:	# Studies	R ²	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	2	--	177.62	168.41	190.51	27	20	35	50%	50%
PEAK OF GENERATOR	43	0.66	10.34	5.59	22.61	62	10	150	51%	49%

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	14,210	7,105	7,105	N/A	N/A	N/A
PEAK OF GENERATOR	827	422	405	760	388	373

SUNDAY

RATES:	# Studies	R ²	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	2	--	166.47	150.59	177.81	27	20	35	50%	50%
PEAK OF GENERATOR	2	--	18.94	17.80	19.75	27	20	35	Not Available	

TRIPS:

	BY AVERAGE			BY REGRESSION		
	Total	Enter	Exit	Total	Enter	Exit
DAILY	13,318	6,659	6,659	N/A	N/A	N/A
PEAK OF GENERATOR	1,515	N/A	N/A	N/A	N/A	N/A

Trip Distribution

Trip Distribution - Residential

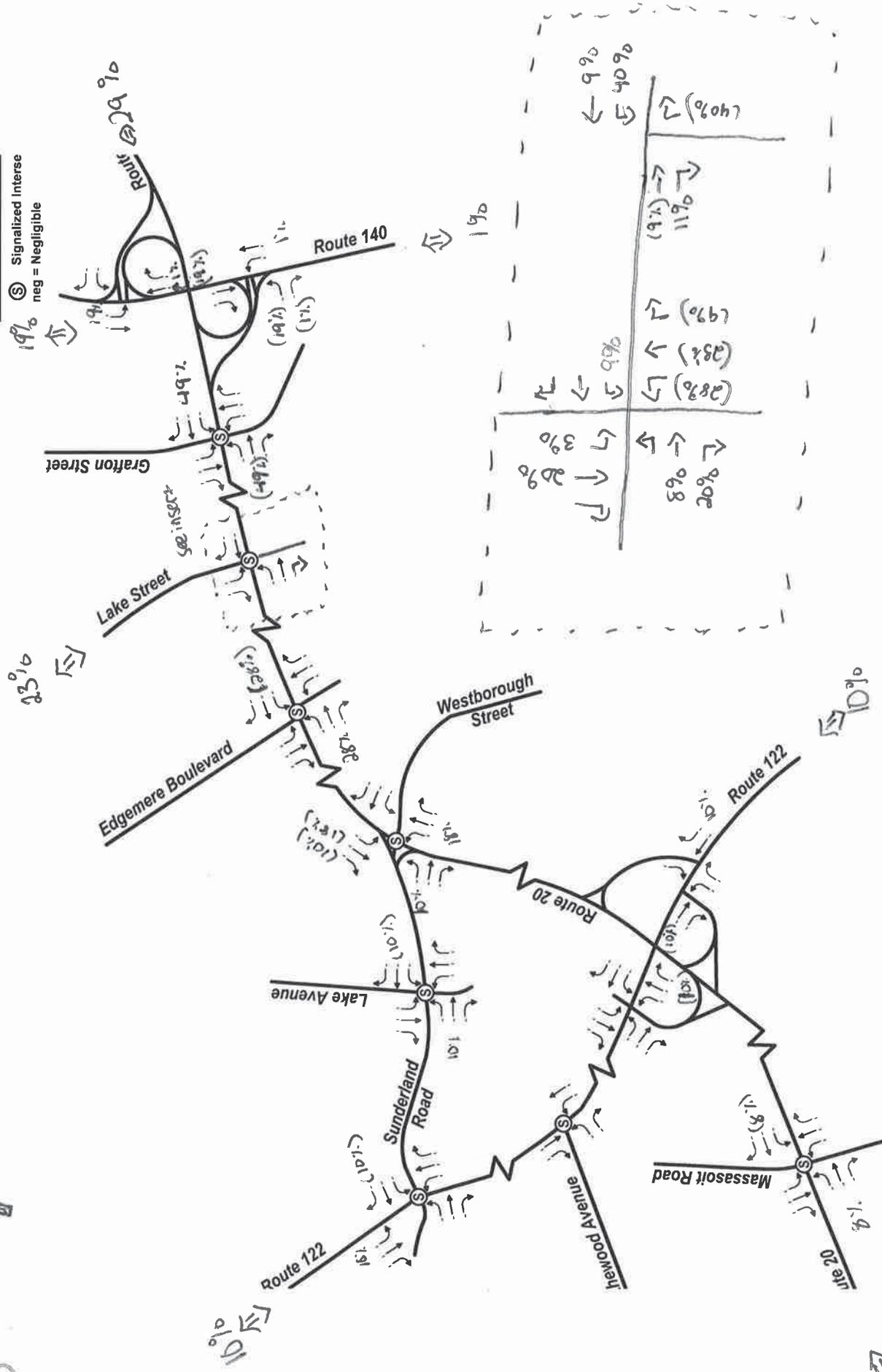
Residence		Total of Workplace										Cumulative Total															
State/U.S. Island Area/Foreign Country	County	MCD	Count	Adjustment Percentage ¹	Adjusted Count	Percent of Total	Cumulative Total	Route 20 (to/from west)	Massasolet Road (to/from south)	Route 122 (to/from south)	Route 122 (to/from north)	Lake Street (to/from north)	Route 140 (to/from north)	Route 140 (to/from south)	Route 20 (to/from east)	Total	CHECK	Route 20 (to/from west)	Massasolet Road (to/from south)	Route 122 (to/from south)	Route 122 (to/from north)	Lake Street (to/from north)	Route 140 (to/from north)	Route 140 (to/from south)	Route 20 (to/from east)	Total	
Massachusetts	Worcester County	Worcester city	3,945	1	3,945	23.8%	23.8%			40%	40%					100%		4.8%	0.0%	0.0%	9.5%	9.5%	0.0%	0.0%	0.0%	0.0%	23.8%
Massachusetts	Worcester County	Shrewsbury town	3,665	1	3,665	22.1%	46.0%				60%		35%	5%	100%			0.0%	0.0%	0.0%	0.0%	13.3%	7.7%	0.0%	1.1%	22.1%	
Massachusetts	Worcester County	Westborough town	1,190	1	1,190	7.2%	53.2%							100%	100%			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.2%	7.2%	
Massachusetts	Middlesex County	Marlborough city	1,145	1	1,145	6.9%	60.1%							50%	50%	100%		0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%	3.5%	6.9%	
Massachusetts	Middlesex County	Framingham town	945	1	945	5.7%	65.8%			25%				75%	100%			0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	4.3%	5.7%	
Massachusetts	Worcester County	Northborough town	635	1	635	3.8%	69.6%						50%	50%	100%			0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	1.9%	3.8%	
Massachusetts	Suffolk County	Boston city	565	1	565	3.4%	73.0%			75%				25%	100%			0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	0.9%	3.4%	
Massachusetts	Worcester County	Southborough town	485	1	485	2.9%	76.0%							100%	100%			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	2.9%	
Massachusetts	Middlesex County	Hopkinton town	270	1	270	1.6%	77.6%							75%	100%			0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	1.2%	1.6%	
Massachusetts	Middlesex County	Waltham city	240	1	240	1.4%	79.0%							50%	100%			0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%	1.4%	
Massachusetts	Middlesex County	Cambridge city	230	1	230	1.4%	80.4%							50%	100%			0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%	1.4%	
Massachusetts	Middlesex County	Hudson town	215	1	215	1.3%	81.7%						50%	50%	100%			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	1.3%	
Massachusetts	Middlesex County	Natick town	210	1	210	1.3%	83.0%			25%				75%	100%			0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	1.0%	1.3%	
Massachusetts	Worcester County	Boylston town	175	1	175	1.1%	84.1%						100%	100%				0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	1.1%	
Massachusetts	Middlesex County	Newton city	170	1	170	1.0%	85.1%			75%				25%	100%			0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.3%	1.0%	
Massachusetts	Worcester County	Charlton town	170	1	170	1.0%	86.1%	100%						100%				1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	
Massachusetts	Middlesex County	Lexington town	160	1	160	1.0%	87.1%			75%				25%	100%			0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.2%	1.0%	
Massachusetts	Worcester County	Auburn town	145	1	145	0.9%	87.9%	50%		50%				100%				0.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	
Massachusetts	Worcester County	Webster town	145	1	145	0.9%	88.8%	100%						100%				0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	
Massachusetts	Middlesex County	Acton town	140	1	140	0.8%	89.7%						80%	20%	100%			0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.2%	0.8%	
Massachusetts	Worcester County	Millbury town	140	1	140	0.8%	90.5%	25%	50%	25%				100%			0.2%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.8%	
Massachusetts	Worcester County	West Boylston town	140	1	140	0.8%	91.4%				20%		80%	100%				0.0%	0.0%	0.0%	0.0%	0.2%	0.7%	0.0%	0.0%	0.8%	
Massachusetts	Worcester County	Grafton town	135	1	135	0.8%	92.2%							100%	100%			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.8%	
Massachusetts	Worcester County	Milford town	115	1	115	0.7%	92.9%			33%				34%	33%	100%		0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%	0.2%	0.7%	
Massachusetts	Worcester County	Clinton town	110	1	110	0.7%	93.5%						100%	100%				0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.7%	
Massachusetts	Worcester County	Barre town	100	1	100	0.6%	94.1%			50%	50%			100%				0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.6%	
Massachusetts	Worcester County	Harvard town	100	1	100	0.6%	94.7%						50%	50%	100%			0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	0.6%	
Massachusetts	Worcester County	Southbridge Town city	100	1	100	0.6%	95.3%	25%		75%				100%				0.2%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	
Massachusetts	Worcester County	Oxford town	95	1	95	0.6%	95.9%	100%						100%				0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	
Massachusetts	Norfolk County	Wellesley town	75	1	75	0.5%	96.4%							50%	100%			0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.5%	
Massachusetts	Norfolk County	Westwood town	75	1	75	0.5%	96.8%			50%				50%	100%			0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.5%	
Massachusetts	Worcester County	Berlin town	75	1	75	0.5%	97.3%						50%	50%	100%			0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.5%	
Massachusetts	Norfolk County	Franklin Town city	70	1	70	0.4%	97.7%							50%	100%			0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	
Massachusetts	Middlesex County	Littleton town	65	1	65	0.4%	98.1%						100%	100%				0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.4%	
Massachusetts	Middlesex County	Lowell city	65	1	65	0.4%	98.5%							100%	100%			0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.4%	
Massachusetts	Middlesex County	Sudbury town	65	1	65	0.4%	98.9%			33%			34%	33%	100%			0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.4%	
Massachusetts	Worcester County	Dudley town	65	1	65	0.4%	99.3%	100%						100%				0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	
Massachusetts	Essex County	Andover town	60	1	60	0.4%	99.6%							100%				0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.4%	
Massachusetts	Hampden County	Springfield city	60	1	60	0.4%	100.0%			100%				100%				0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	
Totals			16,555		16,555	100.0%												8.4%	0.4%	10.1%	9.8%	23.3%	18.5%	1.1%	28.4%	100.0%	
																		8.0%	0.0%	10.0%	10.0%	23.0%	19.0%	1.0%	29.0%	100.0%	

¹ Adjustments were made to some communities based on the likelihood that people who work in those communities would opt to live closer to their place of employment or closer to transit opportunities.

Residential
TD

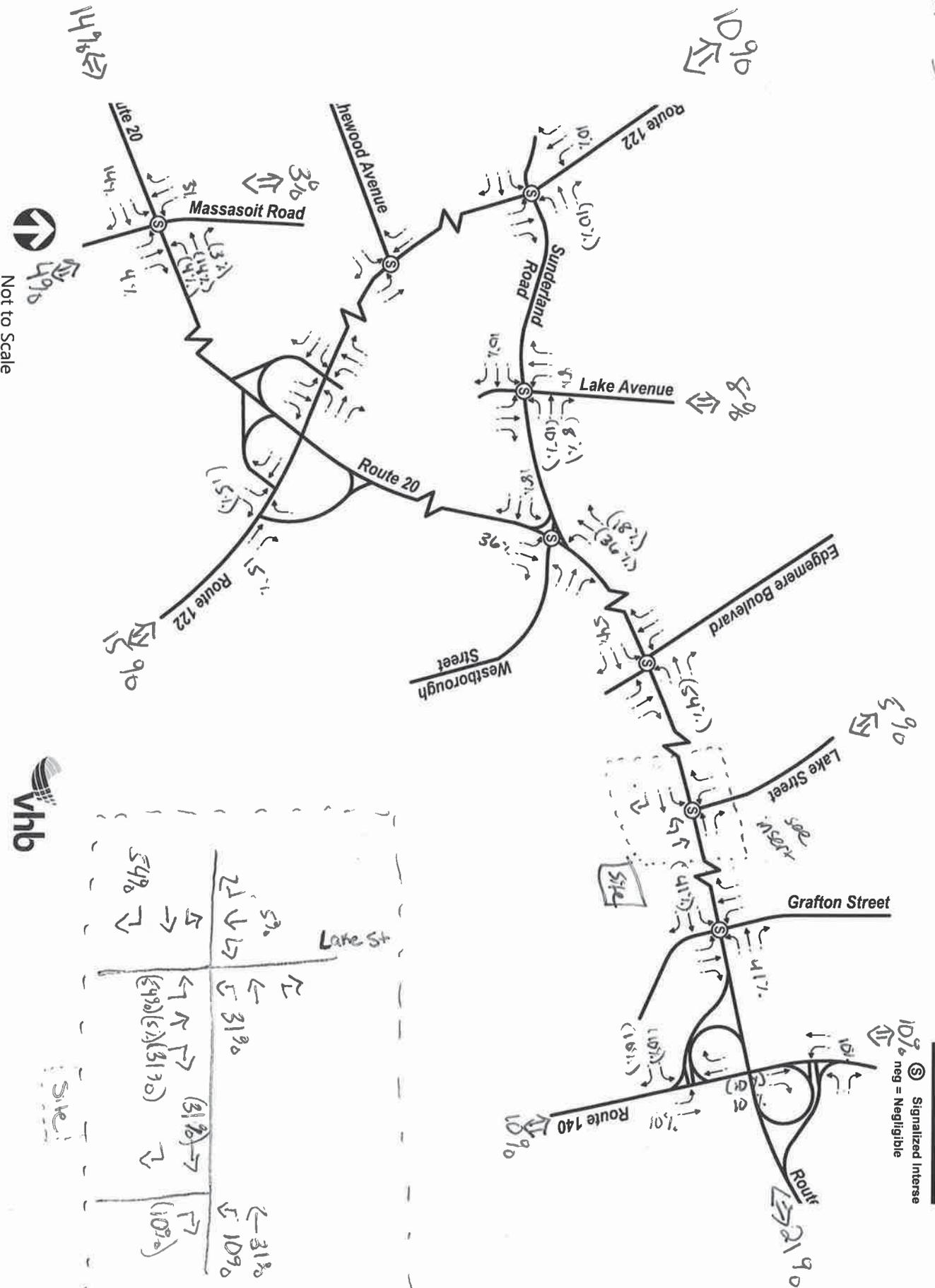
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Ⓢ Signalized Interse
neg = Negligible



DSM Shrewsbury
Shrewsbury, Massachusetts

Refer 1 TD



Not to Scale



DSM Shrewsbury
 Shrewsbury, Massachusetts

Attachment 4: ENF Distribution List

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Attachment 4: MEPA Distribution List

Commonwealth of Massachusetts

Secretary Kathleen A. Theoharides
Executive Office of Energy and
Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Department of Environmental
Protection – Boston Office
Attn: MEPA Coordinator
Commissioner’s Office
One Winter Street
Boston, MA 02108

DEP/Central Regional Office
Attn: MEPA Coordinator
8 New Bond Street
Worcester, MA 01606

Massachusetts DOT
Attn: Lionel Lucien
Public/Private Development Unit
10 Park Plaza
Boston, MA 02116

Massachusetts DOT District #3 Office
Attn: MEPA Coordinator
403 Belmont Street
Worcester, MA 01604

Massachusetts Historical Commission
Attn: Brona Simon
The MA Archives Building
220 Morrissey Boulevard
Boston, MA 02125

Central Massachusetts Regional
Planning Commission
2 Washington Square Union Station –
2nd Floor
Worcester, MA 01604-4016

Town of Shrewsbury

Board of Selectmen’s Office
Attn: Maurice M. DePalo
100 Maple Avenue
Shrewsbury, MA 01545

Shrewsbury Planning and Economic
Development Department
Attn: Kristen Las
100 Maple Avenue
Shrewsbury, MA 01545

Shrewsbury Conservation Commission
Attn: Brad Stone
100 Maple Avenue
Shrewsbury, MA 01545

Shrewsbury Board of Health
100 Maple Avenue
Shrewsbury, MA 01545

Shrewsbury Public Library
609 Main Street
Shrewsbury, MA 01545

Attachment 5: MHC Letter

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BG

The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

June 8, 2006

Secretary Stephen R. Pritchard
Executive Office of Environmental Affairs
Attn.: William Gage, MEPA Unit
100 Cambridge Street, Suite 900
Boston, MA 02114



RE: Residences at Flint Pond, Shrewsbury, MA. MHC #RC.27355, EOEA #12341.

Dear Secretary Pritchard:

Staff of the Massachusetts Historical Commission have reviewed the Notice of Project Change (NPC) for the proposed project referenced above and have the following comments.

The NPC (Section 6.0) contains an accurate summary of the archaeological investigations conducted for the project area, the results of the investigations, and indicates that the project has been designed for avoidance of the Quinsigamond I, II, and III archaeological sites.

MHC requests that the measures outlined in MHC's 6/23/2005 letter (copy enclosed) be employed to protect the sites from inadvertent damage during construction.

These comments are offered to assist in compliance with Massachusetts General Laws, Chapter 9, Sections 26-27C (950 CMR 70-71) and MEPA (301 CMR 11). If you have any questions concerning this review, please feel free to contact Gregory R. Dubell, at this office.

Sincerely,

Brona Simon
State Archaeologist
Deputy Historic Preservation Officer
Acting Executive Director
Massachusetts Historical Commission

Enclosure (MHC 6/23/2005)

cc w/enclosure: Roy W. Smith, BSC Group
Robert Barsamian, Flint Pond Development, LLC
DEP, Central Regional Office
Shrewsbury Historical Commission
Rae Gould, Nipmuc Nation THPO
Deborah C. Cox, PAL